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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/675,376	09/29/2000	Robert Sam Zorich	06031P USA	1401

23543 7590 04/26/2004

AIR PRODUCTS AND CHEMICALS, INC.
PATENT DEPARTMENT
7201 HAMILTON BOULEVARD
ALLENTOWN, PA 181951501

EXAMINER	
CHAUDHRY, SAEED T	

ART UNIT	PAPER NUMBER
1746	

DATE MAILED: 04/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/675,376	ZORICH ET AL.	
	Examiner	Art Unit	
	Saeed T Chaudhry	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 February 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5-19,22,28,29,33,40 and 42-44* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *5-7,28 and 29* is/are allowed.

6)☒ Claim(s) *1,8-19,22,33,40 and 42-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Applicant's amendments and remarks filed February 4, 2004 have been acknowledged by the examiner and entered. Claims 2-4, 20-21, 23-27, 30-32, 34-39 and 41 have been canceled and claims 1, 5-10, 22, 28-29, 33, 40 and 42-44 are pending in this application for consideration.

Claim Rejections - 35 USC § 112

Rejection of claims under 35 U.S.C. § 112, second paragraph, has been withdrawn in view of the amendments filed on February 4, 2004.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 11-12, 14-15, 17-18, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Voloshin et al.

Voloshin et al. (5,964,230) disclose a method and apparatus for solvent purging a process line of chemical in a process chemical system. A source container of solvent 10 (source chemical solvent ampoule) is connected to a source of push gas through line 12 and push gas

valve V.sub.3. The push gas is a pressurized high purity inert gas, such as; nitrogen, helium or argon used to push solvent through various process lines. The container 10 is filled with additional solvent as necessary through line 14 and valve V.sub.11. Solvent is dispensed from the container 10 through line 16, third solvent valve V.sub.1, line 18, first solvent valve V.sub.2, line 24, second solvent valve V.sub.4 and finally solvent delivery line 28, which ends in a coaxially internal discharge nozzle 32 inside process line 30. Solvent delivery line 28, including lines 24, 18 and 16, is also connected to a second source of vacuum 22 through valve V.sub.12, and line 20, as well as a source of purge gas 29, which is connected controllably to line 24 through valve V.sub.3 and line 26. A source of process chemical 36 is provided in a suitable container, which in the electronics industry is typically a bubbler or a direct liquid injection device. The process chemical is delivered by the pressure of an inert gas 42 controllably delivered through valve V.sub.14 and line 40. As the inert gas 42 pressurizes the source 36, process chemical is delivered through line 38 and first process valve V.sub.6 to process line 30. Normally, process line delivers process chemical through second process valve V.sub.5 to a downstream process chemical use station or tool 34. When it is appropriate to clean out process line 30, such as during down time, changeout of the container 36, maintenance of the system or change in the type of chemical being utilized, it is necessary to remove residual process chemical from the process line 30. Initially, this is done through vent valve V.sub.7 and vent line 44. Vent line 44 is controllably connected to a first source of vacuum 52 either directly through vent valve V.sub.9 having an upstream orifice near the vent line 44 and a downstream orifice near the first source of vacuum 52. The vent line 44 may also be controllably connected to the first source of vacuum 52 through line 46, valve V.sub.8, vent

storage vessel 48 (solvent capture ampoule), valve V.sub.10 and line 50, which connects to said first source of vacuum 52. Alternatively, the vent line 44 may be connected to the source of process chemical 36 via valve V.sub.15 and line 54 so as to return process chemical to source container 36 (see col. 6., lines 57 to col. 7, lines 1-30).

This solvent purge manifold completely removes traces of process chemical from the delivery lines, regardless of chemical volatility, by introducing a solvent suitable for the process chemical into the space immediately downstream of the chemical supply vessel. Each chemical may have its own optimal solvent, for example, 1,1,1,5,5,5-hexafluoro-2,4-pentanedionato copper (I) trimethylvinylsilane is most easily removed using trimethylvinylsilane, while trimethylphosphate can be removed using methanol or isopropyl alcohol. The reference fails to disclose that the high purity source chemical container, the source chemical solvent ampoule and the solvent capture ampoule are combined together in to a single assembly suitable for shipping and replacing in one piece.

It would have been obvious at the time applicant invented the claimed apparatus to attach the source chemical solvent ampoule and the solvent capture ampoule to the body of the high purity source chemical container for purpose of easy in movability of the apparatus since it has been held obvious to rearrange of parts or making portable are matter of choice and design choice (see *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950) and *In re Lindberg*, 194 F.2d 732, 93 USPQ 23 (CCPA 1952)). Voloshin et al apparatus containers are attached to each other through the piping system. Therefore, all the containers are integral to of container 36.

Claims 8-10, 13, 16, 19, 33, and 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voloshin et al in view of Cripe et al.

Voloshin et al were discussed supra. However, the reference fails to disclose a diptube connected to the outlet and extend to a point adjacent a bottom of the container or level sensor or solvent ampoule under pressure or capture ampoule under vacuum..

Cripe et al. (5,607,000) disclose containers having dip tubes adjacent to the bottom of the container for exiting liquid from the dip tube. Also, the reference discloses magnetic reed switch level control 12 for high 37 and low 36 level which give signal outputs via line 46 to main controller (see col. 3, lines 35-42 and lines 51-54).

It would have been obvious at the time applicant invented the claimed apparatus and process to include dip tube and level sensor as disclosed by Cripe et al. for the purpose of removing liquid from the container and to check the level of liquid in the containers. One of ordinary skill in the art would use a pressurized tank or a vacuum tank instead of using pressure pump or vacuum pump to reduce the cost of the apparatus and to reduce the wait of the apparatus. It would have been obvious to use welding or soldering or other fastening means to tie the tanks for the purpose of having all the tanks together and easy for handling the tanks.

It would have been obvious at the time applicant invented the claimed apparatus to attach the source chemical solvent ampoule and the solvent capture ampoule to the body of the high purity source chemical container for purpose of easy in movability of the apparatus since it has been held obvious to rearrange of parts or making portable are matter of choice and design choice (see *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950) and *In re Lindberg*, 194 F.2d 732, 93 USPQ 23 (CCPA 1952)).

Allowable Subject Matter

Claims 5-7 and 28-29 are allowed over the cited prior art.

Reasons For Allowable Subject Matter

The following is an Examiner's statement of reasons for the indication of allowable subject matter:

None of the prior art discloses or suggests to have a chime ring bracket on an exterior of the high purity chemical source container or wherein high purity chemical container has a baffle to define two chambers to contain two distinct high purity source chemicals wherein each chamber has at least one inlet to the interior of such chamber and at least one outlet from the interior of such chamber.

Response to Applicnat's Arguments

Applicant argued that the solvent ampoule and the solvent capture ampoule are attached directely to the main body container wall of the source chemical container. This is distinct from US 5,964,230 which does not show any particular association of the solvent source ampoule, source chemical container or solvent capture ampoule other than a flow path association.

This argument is not persuasive because Voloshine et al and Cripe et al both show solvent and chemical containers attached through the piping system and it has been held obvious to rearrange of parts or making portable are matter of choice and design choice (see *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950) and *In re Lindberg*, 194 F.2d 732, 93 USPQ 23 (CCPA 1952)). Therefore, one of ordinary skill in the art would attach the source chemical solvent ampoule and the solvent capture ampoule to the body of the high purity source chemical container for purpose of easy in movability of the apparatus.

Applicant's arguments filed February 4, 2004 have been fully considered but they are not persuasive.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saeed T. Chaudhry whose telephone number is (571) 272-1298. The examiner can normally be reached on Monday-Friday from 9:30 A.M. to 4:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Randy Gulakowski, can be reached on (571)-272-1302. The fax phone number for non-final is (703)-872-9306.

When filing a FAX in Gp 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are for entry into the file of the application. This will expedite processing of your papers.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-1700.

Saeed T. Chaudhry
Patent Examiner
April 21, 2004

FRANKIE L. STINSON
PRIMARY EXAMINER
GROUP ~~3400~~
1700